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Via Electronic Mail

October 1, 2008

Philip Giudice, Commissioner
Massachusetts Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114

Re: Massachusetts Department of Energy Resources' Inquiry into the Feasibility of Implementing Sections 105 (c)(3) and (e) of Chapter 169 of the Acts of 2008.

Dear Commissioner Giudice:

Environment Northeast ("ENE") appreciates the opportunity to submit these comments in response to the Department of Energy Resources' inquiry regarding the feasibility of implementing certain renewable energy import requirements contained in the Green Communities Act ("GCA" or "the Act"). ENE is a regional non-profit organization that researches and advocates innovative environmental policies for New England ("NE") and eastern Canada ("EC"). ENE is at the forefront of state, provincial, and regional efforts to combat global warming with solutions that promote clean energy, clean air, healthy forests, and a sustainable economy.

In addition to its work in Massachusetts and other northeastern states, ENE has staff and offices in eastern Canada and works with provincial regulators, utilities, and generation developers on cross border energy issues with the objective of transitioning the entire region to a low-carbon economy, at the lowest total cost, consistent with environmental protections. One element of this work is our promotion of the development of clean energy resources throughout NE and EC and the creation of market rules that bring these resources online as soon and as efficiently as possible, contingent on the adoption of appropriate environmental safeguards.

Overview

ENE applauds Massachusetts' leadership in enacting *An Act Relative to Green Communities* which, among other important elements, establishes a progressive Renewable Portfolio Standard ("RPS") target for the state. The Patrick Administration has been a profound leader on clean energy and global warming policy and is to be commended for swift implementation of these and other portions of the Act. With respect to the new imports issues, ENE respectfully urges the Department to find that two of the newly enacted import provisions at issue, specifically sub-sections 105(c)(3) and (e), are not feasible now, and will not be feasible in the future.

In sum, these provisions facially discriminate against renewable energy imported from New York, New Brunswick/Maritimes and Québec control areas in violation of the Commerce Clause and the North American Free Trade Agreement. The restrictions contained in these provisions will not pass the test of

serving a legitimate state interest and being narrowly tailored to serve such interest. The sub-section 105(e) "netting" provision is unfeasible as the NEPOOL GIS tracking system currently in place is incapable of the task, and it would be excessively burdensome to upgrade the system or devise a new one. At a minimum, the Department's definition of feasibility should consider legal issues and the commercial and administrative practicality. By an objective application of such definition, the provisions in question should be found to fail the test.

Further, the Department's definition of feasibility might also reasonably consider the long term cost impacts of §105(c)(3) and (e) on the ratepayers of Massachusetts and whether such costs make the provisions politically workable or sustainable. While ENE expects in-state resources – including renewable energy, energy efficiency and distributed generation – to contribute significantly to meeting the Commonwealth's future energy needs, it is likely that a resource portfolio that successfully meets the new RPS requirements will need to include some amount of renewable energy imported from adjacent control areas. By effectively excluding cost-competitive renewable energy from adjacent control areas, §105(c)(3) and (e) will inflate RPS compliance costs and pose a significant risk of political backlash. The political risk associated with unnecessarily high costs of compliance, which could lead to difficulty in achieving the laudable goals of the new RPS targets, is further evidence that the provisions in question are not feasible.

In addition to the foregoing, muting regional renewable energy development will have consequences in terms of achieving necessary long-term greenhouse gas (GHG) emissions reductions. ENE's *Climate Change Roadmap for New England and Eastern Canada* (2006) contains five electric fuel mix scenarios that were generated to compare regional GHG emissions reduction potentials in 2020 and 2050. The scenarios include varying levels of supply and demand resources but do not predict or attempt to model a future outcome based on economics or a carbon cap. One of the five scenarios ("Scenario 3") – depicted in the Figures 1 and 2 below – assumes level load growth and a regional increase of 15% new renewables by 2020. This scenario illustrates plausible levels of renewable energy needed to achieve a GHG emissions reduction target of 75-85% below 2001 levels by 2050.

Figure 1: Modest energy efficiency with rapid renewables development (renewables increase by 1 percent/yr to 15 percent in 2020, then increase by 0.25 percent/yr to 22.5 percent in 2050)

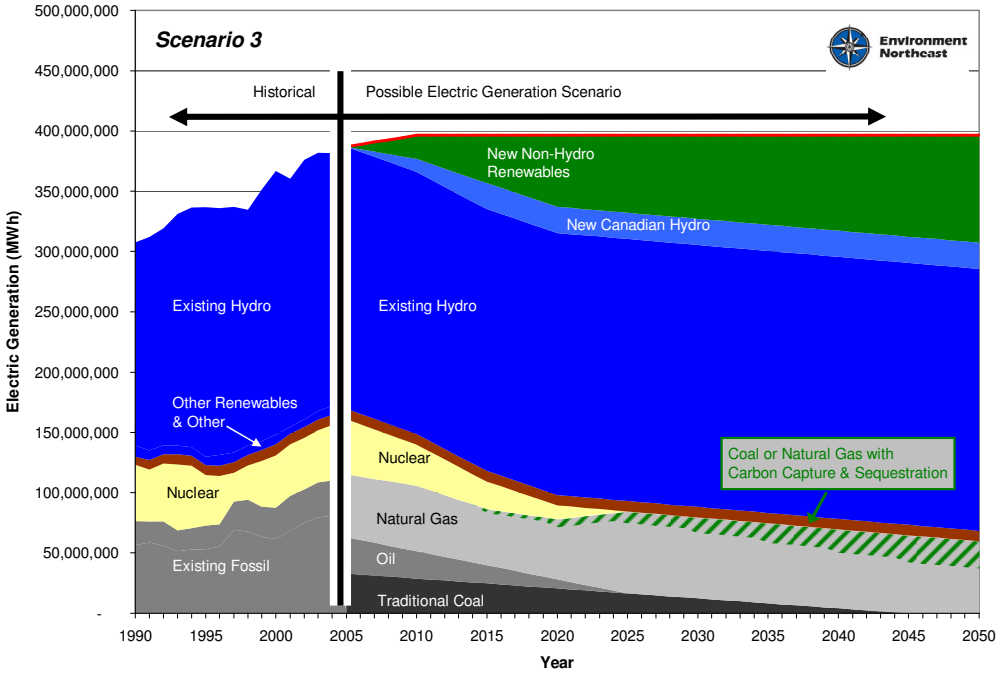
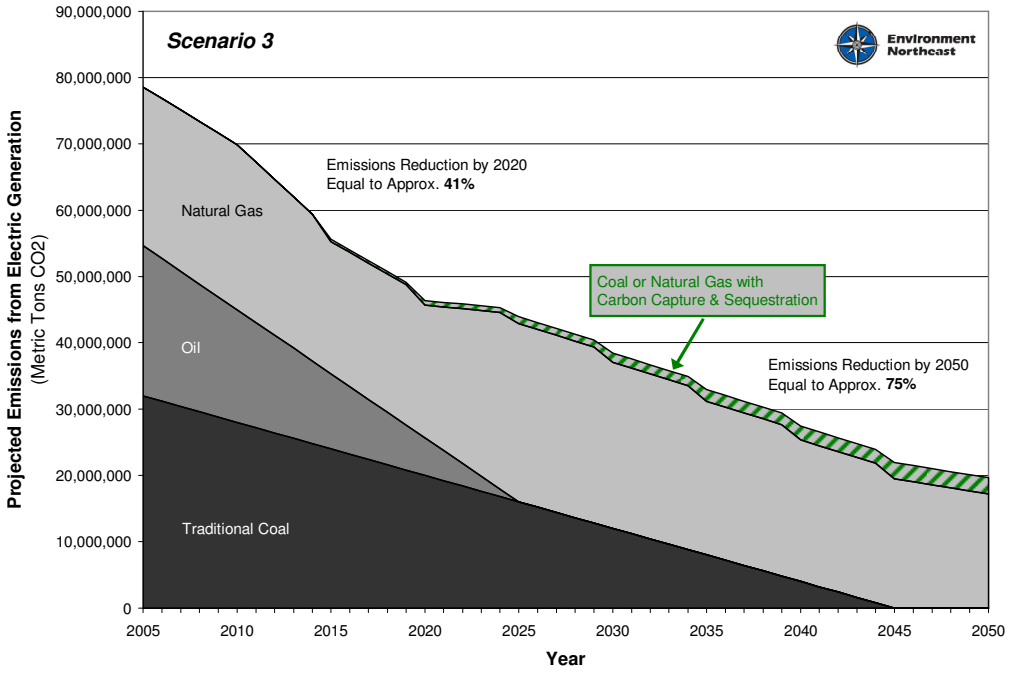


Figure 2: Increased investments in renewables could allow dramatic reductions in fossil-fueled based electricity.



The point from these figures is that to achieve sustainable levels of greenhouse gas emissions, we need to promote significant renewable energy (15% or more) by 2020 on a *regional* basis. Limiting customers' access to imported renewable energy supplies will delay the region's ability to achieve these high penetration levels of renewables and to develop a truly regional marketplace for energy.

Requiring Renewable Importers to Commit as a Capacity Resource is Not Feasible

To be eligible for the Massachusetts RPS under §105(c)(3) of the Act, an importing generator must commit "the renewable generating source as a committed capacity resource for the applicable annual period." Such a requirement is not feasible from a legal standpoint as a renewable generating source located in a control area adjacent to ISO-NE would be exposed to the risk of additional economic costs. As a committed capacity resource, generating sources must schedule delivery one day in advance and deliver power to ISO-NE when requested. An inability to schedule in real-time (hour-by-hour) negatively impacts intermittent resources, such as wind, if they incur a financial penalty for any deviation from their commitment as future output cannot be predicted with absolute certainty. In addition, capacity resources must purchase firm transmission which is an added cost that will not be maximized by an intermittent resource such as wind.

Moreover, it is unclear under the language of §105(c)(3) whether renewable imports would be eligible for Massachusetts RECs until 2013. If imported renewable resources are required to include capacity in contracts beginning in 2009, it will be impossible to qualify through the Forward Capacity Market ("FCM") as, based on the auction schedule, the earliest capacity commitment period a new resource can now qualify for begins in 2013. Even then there is no guarantee that a resource that bids into the Forward Capacity Auction will qualify and be selected.

It is important to note that renewable resources within the ISO-NE region have no such capacity obligations and could conceivably commit capacity to a region outside of ISO-NE. This disproportionate treatment not only increases the likelihood that renewable generating sources located

outside ISO-NE will incur additional costs, but also raises the very real concern that the capacity provision of the Act violates the Commerce Clause of the U.S. Constitution and potentially the North American Free Trade Agreement as well. The cloud of legal uncertainty over the legal viability of the capacity requirement supports a finding that it is infeasible.

The "Netting" Requirement of Section 105(e) is Not Administratively Feasible

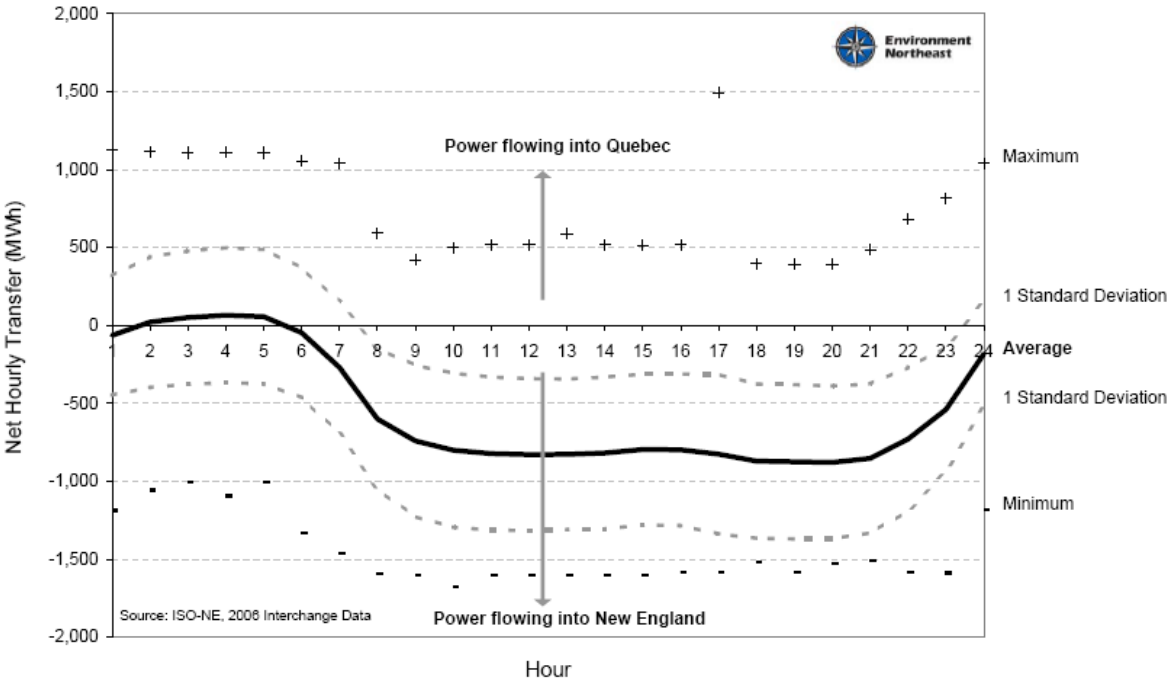
Section 105(e) of the GCA states:

> (e) The renewable portfolio standard credit applicable to the eligible renewable energy as determined under subsection (d) shall be reduced by any exports of energy from the ISO - NE control area made by the person seeking renewable portfolio credit for such renewable energy or any affiliate of such person, or any other person under contract with such person to export energy from the ISO -NE control area and deliver such energy directly or indirectly to such person.

This language appears to put forth a "netting" requirement. However, it is unclear from the statutory language whether the matching of RECs delivered and energy exported occurs on a simultaneous basis (*i.e.,* during that same hour), on an annual basis, or on some other time period. While ENE believes that protections should be in place to prevent emission "leakage," tracking attributes associated with each transaction and matching them with the appropriate import/export transactions, parties, and period is likely to be onerous and could lead to an administrative burden that would render proper accountability unmanageable.

The electricity market is a dynamic market between ISO-NE and adjacent control areas as illustrated by Figure 3, which outlines the transfer of electricity between Québec and New England along Hydro Québec Phase I/II on an hourly basis (2006). An accurate representation of the netting requirement would instead require plotting the transfer of only qualified renewable energy imports into NE against all exports from the region into Québec (thus reducing the ratio of imports to exports) and tying each transfer to its owner before comparing transactions. It is ENE's understanding that this type of tracking is not immediately feasible and would require costly investments in the NEPOOL-GIS system. Furthermore, because Massachusetts would be the only state in the region to require such tracking, it is unreasonable to ask ratepayers to bear the costs of such investments. As a result, it would be infeasible to track and verify such transactions at this time.

Figure 3: Illustration of electricity transfers along Hydro Québec Phase I/II on an hourly basis in 2006.



REC Supply and the Impact on Massachusetts Ratepayers

In 2006, the state's RPS required 2.5% of total energy supply to come from new renewable sources. Of this 2.5%, generation units in Massachusetts supplied approximately 230 GWh (18%) of eligible renewable electricity used for compliance.[1] In terms of the total in-region contribution, generation from sources located in the ISO-NE control area met 60% of the RPS target.[2] Imports from New York, Ohio, Québec, and Prince Edward Island along with Alternative Compliance Payments (which totaled $17.8 million in 2006)[3] made up the balance.

A 180% increase in generation over 2006 levels from sources located inside ISO-NE would be required to meet Massachusetts' RPS target in 2009 if participation were limited to in-region sources only. A ten-fold increase would be required to fulfill the 2020 target in a similar manner.[4] This is a significant amount of new capacity, especially considering the demand for new renewable electricity created by the other state RPS programs in the region. Therefore, based on (a) current capacity, (b) the rate of RPS ramp-up in Massachusetts and other NE states, and (c) the time to site, permit, and build new power plants and transmission infrastructure, it is unlikely that the MA RPS can be fulfilled exclusively with in-region renewables.

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[1] Giudice, P., I. Bowles, (2008). *Potential for Renewable Energy Development in Massachusetts*, page 2.
[2] Division of Energy Resources, Executive Office of Energy and Environmental Affairs, Commonwealth of Massachusetts (2008), *Massachusetts Renewable Energy Portfolio Standard Annual RPS Compliance Report for 2006*, pg 11.
[3] Ibid, page 4.
[4] MA RPS requirement is 4 percent (~ 2,080,000 MWh) in 2009 and 15 percent (~ 7,500,000 MWh) in 2020 (from above footnotes). Generation from eligible in-region sources was equal to 80% of the eligible generation (60% of the total compliance obligation) or 751,000 MWh. The 2009 and 2020 RPS targets are 2.8 and 10 times great, respectfully, than 2006 in-region generation levels.

Conclusion

For the foregoing reasons, ENE believes that the imports requirements under sub-sections 105(c)(3) and 105(e) of the Green Communities Act are not feasible. We respectfully request that the Department conclude that these requirements are not feasible and, pursuant to Section 105(h), should not take effect.

Again, ENE commends Governor Patrick, the Department, and the Executive Office of Energy and Environmental Affairs for its extraordinary leadership on clean energy and climate issues. We appreciate the opportunity to offer these comments and look forward to continued participation as the Department moves forward with its assessment.

Sincerely,

/s/ Leslie Malone

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Leslie Malone
Policy Analyst

/s/ Jeremy McDiarmid

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Jeremy McDiarmid
Staff Attorney

cc: Robert Sydney, Department of Energy Resources
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